

Political Culture and Democracy:

Analyzing Cross-Level Linkages

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Abstract

Do individual-level attitudes play a significant role in sustaining democratic institutions at the societal level? In a recent contribution to this journal, Seligson claims that the strong aggregate-level correlations that Inglehart has found between political culture and stable democracy are “spurious” because Seligson does not find individual-level correlations between Inglehart’s indicators of political culture, and overt support for democracy. Seligson’s analysis exemplifies precisely the sort of cross-level fallacy that he attributes to Inglehart: he equates individual-level support for democracy, with the presence of democratic institutions. Surprising as it may seem, however, individual-level lip service to democracy is only weakly linked with societal-level democracy. At this point in history, democracy has a positive image almost everywhere, but these favorable opinions are often superficial, and unless they are accompanied by deeper-rooted orientations of tolerance, trust, and a participatory outlook, the chances are poor that effective democracy will be present at the societal level. On the other hand, as we demonstrate, the linkage between these deeper-rooted orientations and effective democracy, is remarkably strong: a political culture of tolerance, trust and participatory orientations seems to essential to effective democracy.

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Introduction

This article responds to Mitchell Seligson's contribution in a recent issue of this journal.¹ Seligson raises a classical and still controversial issue in comparative politics: what role does political culture play in sustaining stable democratic institutions? He examines this question in light of one of the central methodological problems in cross-national research: the linkage between individual level and aggregate level relationships.

Seligson starts by claiming that cross-national correlations that do not also appear at the individual level within each nation are "spurious," citing a passage to this effect by Przeworski and Teune.² Although this claim has been widely accepted, it is clearly groundless, as this article will demonstrate. Basing his argument on this assertion, Seligson attempts to invalidate Inglehart's findings that there are strong aggregate-level correlations between political culture and stable democracy. Seligson claims that the aggregate level findings are spurious because he does not find individual level correlations between these political culture indicators and support for democracy.

This article will demonstrate that—ironically enough-- Seligson's conclusions exemplify precisely the sort of cross-level fallacy that Robinson warned against.³ The central point of the Ecological Fallacy thesis is that strong aggregate-level relationships are *not* necessarily reproduced at the individual level. When Robinson was writing, districts with large percentages of African Americans (then located mainly in the South) generally elected segregationist candidates; but, as Robinson

demonstrated, this relationship was not reproduced at the individual level—Blacks did *not* vote for segregationist candidates. This did not mean that the aggregate level relationship was somehow “spurious;” no one questions the fact that, districts with large numbers of African Americans really *did* elect the worst sort of segregationists, in a pattern of repression that endured for decades.

Seligson turns the argument the wrong way around, claiming that an aggregate-level finding *must* be reproduced at the individual level – and if it isn’t, it is somehow “spurious.” This claim is groundless, as Robinson demonstrated more than 50 years ago, and as more recent evidence presented in this article will confirm.

Moving farther in misinterpreting the Ecological Fallacy, Seligson equates individual-level support for democracy, with the presence of democratic institutions. Superficially, this seems plausible. But in fact, at this point in history, individual-level lip service to democracy is only weakly linked with societal-level democracy. Since the collapse of communism, democracy has attained a positive image in virtually every country in the world. But these favorable opinions are often superficial, and unless they are accompanied by deeper-rooted orientations of tolerance, trust, and a participatory outlook, the chances are poor that effective democracy will be present at the societal level. In striking contrast to Seligson’s unproven cross-level assumption, mere lip service to democracy is *not* necessarily linked with actual democracy at the societal level, as we will demonstrate: at this point in history, it is almost as strong in authoritarian societies or unstable democracies, as in stable democracies.

On the other hand, as this article will demonstrate, the linkage between a deeper-rooted syndrome of “Self-expression” orientations, and effective democracy, is remarkably strong. A controversial body of literature that goes back to Lipset⁴ and

Almond and Verba⁵ is basically correct: a specific type of political culture seems to be an essential precondition to effective democracy.

1. Misconceptions of the Ecological Fallacy

Seligson's contribution is based on a misconception of the problem of cross-level inferences. This is its crucial flaw. It also involves a minor problem that we will briefly discuss before addressing the major one. First, Seligson equates aggregating individual level responses with the individualistic fallacy, as if aggregating such responses were inherently wrong. Actually, aggregating individual level attitudes to the nation level is a perfectly legitimate procedure, and is essential to any attempt to depict the features of national mass cultures. The individualistic fallacy consists in making the incorrect assumption that an individual-level relationship also has similar strength and direction at the aggregate level.

Seligson's crucial misconception is that cross-national correlations are "spurious" if they are not also present at the individual level within each nation. Although this claim is often accepted, it is simply not true—and, in fact, it represents precisely the type of fallacious cross-level inference that was exposed by the Ecological Fallacy thesis. Deciding whether a relationship is genuine or spurious, on the basis of whether this relationship occurs at another level of analysis, is exactly what Robinson warned us *not* to do: it is an unwarranted cross-level inference. Whether or not a relationship is spurious, can only be determined by evidence at the same level of analysis. Thus, in the classic case, the question of whether or not individual African-Americans were voting for segregationist candidates could only be decided by individual-level evidence—not by state-level correlations. The methodological axiom on which Seligson bases his analysis is a clear

misinterpretation of the level of analysis problem. To demonstrate this point, let's consider some examples.

In Robinson's case, the fact that electoral units with high percentages of African-Americans tended to elect segregationist representatives did not mean that African-Americans were segregationists--the opposite was true. Conversely, the fact that African-Americans were not segregationist did not mean that the district-level linkage between racial composition and segregationist policies was "spurious." The correlation between race and electoral behavior reversed its sign when one moved from the individual level to the aggregate level, and the findings at both levels of analysis were genuine and important.

Similarly, in contemporary France the vote for the xenophobic National Front tends to be highest in districts with high percentages of Islamic immigrants. This does not mean that the immigrants are supporting the National Front. They are not. And conversely, the fact that the immigrants are not voting for the FN does not mean that the linkage between ethnicity and politics is "spurious:" the relatively high percentage of immigrants has a major impact on the vote for the National Front, even though the correlation between vote and immigrant status reverses its polarity from one level of analysis to another.

Likewise, the fact that jobless Germans in the early 1930s did not show a stronger tendency to vote for the Nazis than those Germans who still were employed does not mean that there was no causal linkage between unemployment and the Nazi-vote share. Sharply rising unemployment rates created a climate of anxiety that affected all social groups, whether employed or not, increasing their readiness to vote for the Nazis. Thus, the rise in unemployment levels from the late 1920s to the early 1930 was followed by a strong increase in the Nazi vote. The fact that the

unemployed were as likely to vote communist as Nazi, at the individual level, does not mean that unemployment was unimportant.

As these examples demonstrate, it is perfectly possible—and is frequently the case-- that an aggregate level linkage is not reflected at the individual level. This does not mean that this linkage is somehow unreal or “spurious.” Quite the contrary, aggregate-level linkages often have more impact on societal phenomena than those found at the individual level. Assuming that rising unemployment has no impact on support for extremist parties because there is no linkage between unemployment and extremism at the individual level would be committing the “individualistic fallacy.”⁶ Seligson, nevertheless, claims that the linkage that Inglehart found between interpersonal trust and democratic institutions at the aggregate level is “spurious” because he finds no linkage between trust and support for democracy at the individual level. This conclusion is a classic case of the individualistic fallacy.

2. Outdated Measures of Political Culture and Democratic Institutions

Seligson’s article examines the individual-level correlations among a set of indicators that Inglehart used in analysis of the 1981 World Values Surveys. Anyone reading this article would probably assume that it also refers to Inglehart’s recent work. Actually, Inglehart’s analysis of the 1990-91 surveys and his subsequent work moves beyond the indicators tested in Seligson’s article (life satisfaction and interpersonal trust), incorporating them into a broader set of indicators of political culture. This fact is of relatively minor importance. The critique in this article applies equally to Inglehart’s original findings or to the more recent work: societies with relatively high levels of interpersonal trust and life satisfaction are significantly more

likely to have democratic institutions than societies with lower levels, and this linkage is by no means “spurious.”

Nevertheless, to bring the argument up to date, it is worth noting that Inglehart⁷, Inglehart and Baker⁸, as well as Welzel⁹ and Welzel, Inglehart and Klingemann¹⁰ have identified a broader syndrome of “self-expression values” that includes not only interpersonal trust and life satisfaction but also several other attitudes that seem to play even more important roles in promoting democracy. As we will demonstrate, the respective publics’ locations on this self-expression values dimension, together with economic indicators, explain roughly 80 percent of the variance in democratic institutions. The dependent variable in this analysis is an indicator of democratic institutions that we refer to as “effective democracy.” Let us briefly describe these measures before analyzing their linkages.

3. Improved Measures of Political Culture and Democratic Institutions

SELF-EXPRESSION VALUES: Self-expression values are a syndrome of mass attitudes that tap a common underlying dimension, reflecting emphasis on freedom, tolerance of diversity, and participation. This is true at both the individual level and the aggregate level, as the factor loadings in Table 1 indicate. Self-expression values are present in a political culture in so far as the public emphasizes “liberty and participation,” “public self-expression,” “tolerance of diversity,” “interpersonal trust” and “life satisfaction” (see the footnotes to Table 1 for the construction of these variables). All these attitudes tap a common underlying dimension, showing positive loadings on a self-expression values factor. This pattern applies at three different levels of analysis: the individual level within nations, the pooled cross-national individual level data, and the aggregate national level. The strength of the factor

loadings rises systematically as we move from the individual level within nations to the aggregate cross-national level.

[Table 1: about here]

The fact that self-expression values are more strongly structured at the aggregate level than at the individual level, reflects a well-known phenomenon: individual level survey data are affected by random measurement error that is cancelled out through aggregation. As Blalock¹¹ observed some time ago, the variation in individual-level attitudes consists of a systematic component and a random component. Consequently, the correlation between two different attitudes consists of a systematic term and a random term, in which the random term diminishes the correlation—what Blalock called the “attenuation effect.” This attenuation effect is relatively large at the individual level because, as Converse¹² first observed, significant numbers of survey respondents give random answers, producing a substantial amount of measurement error. In so far as the responses are random, this weakens the correlations between them, making individual level correlations relatively weak.¹³

But when attitudes are averaged across nations, the random variations offset each other: random negative and positive deviations from the national mean tend to cancel each other out.¹⁴ Following the law of large numbers, this “reduction of error” becomes more pronounced as the number of individuals being aggregated rises. Consequently, the random term becomes smaller, and the systematic correlation larger, at higher levels of aggregation. Consequently, aggregation to the nation-level does not produce “spurious” correlations. Quite the contrary, aggregation often *reveals* systematic correlations that may be hidden by measurement error at the individual level within nations. Hence, the syndrome of self-expression values is

much more pronounced at the aggregate national level than at the individual level within nations (compare columns 1 and 3 in Table 1). As Erikson, MacKuen and Stimson¹⁵ argue, analysis at the aggregate often provides a more accurate view of the underlying relationships than is available from individual-level analysis.

The strength of the correlations at the pooled individual level, falls between these two extremes (compare column 2 with columns 1 and 3 in Table 1). At the pooled individual level, the variation in an attitude is composed of the deviations from the mean within nations, which may be random to a relatively large degree, and the deviations from the mean between nations, which are largely systematic. Thus, at the pooled individual level there is more *systematic* variation than at the individual level within nations; and in turn, the pooled individual level entails more *random* variation than the aggregate level. This is why the factor loadings of the self-expression values syndrome increase from the individual level within nations to the pooled individual level to the aggregate level.

In short, relatively weak correlations at the individual level do not indicate that relatively strong aggregate level correlations are somehow false or “spurious.” Quite the contrary, aggregate correlations may reveal linkages that are obscured by random measurement errors at the individual level. Moreover, the aggregate level is precisely the level at which democracy exists: democracy is an attribute of nations, not of individuals. Hence, if we are interested in the impact of mass attitudes on democracy, it is a society’s *mass tendency* in these attitudes that matters and not the individual-level attitudinal structure, as Seligson assumes.

EFFECTIVE DEMOCRACY: Since democratic institutions will be our dependent variable, it is important to measure them with reliable indicators. In particular, it is

crucial to differentiate between mere formal democracy or “electoral democracy,” and effective democracy.

Democracy is central to people’s lives because it establishes civil and political rights that enable them to make free choices. Providing legal guarantees of these rights creates formal democracy--which is a necessary component of democracy. But formal rights alone are not sufficient: formal rights are effective only in so far as elites respect these rights in their actual behavior. Law-abiding elite behavior, or “elite integrity,” is an expression of the rule of law that, as Rose¹⁶ and others have pointed out, distinguishes effective democracy from formal democracy. Hence, our measure of effective democracy combines formal democracy (i.e., freedom rights) and elite integrity. We weight the scope of *freedom rights* by the extent to which *elite integrity* is present, in order to measure *effective democracy*.¹⁷

We measure freedom rights using the combined Freedom House scores for civil and political rights.¹⁸ The scores from Freedom House range from 1 to 7 on each of the two scales, with 1 indicating the highest and 7 the lowest level of freedom (i.e., civil rights and political rights).¹⁹ We reversed this scale so that higher figures indicate a broader scope of freedom rights. The scores from Freedom House are expert ratings of the extent to which certain individual rights are guaranteed.²⁰ We use the most recent Freedom House scores from 1999-2000 in order to ensure that our measure of freedom rights is subsequent in time to the political culture indicators that we use as predictors of democracy.

The Freedom House scores are imperfect measures of freedom rights. They do not take into account the extent to which given rights are respected in actual elite behavior. To overcome this problem, we use the corruption perception indices developed by Transparency International.²¹ These scores are also expert ratings; they

judge how corrupt the political, bureaucratic and economic office holders of a country are. One indication of the validity of these estimates is that they strongly correlate with aggregate measures of the citizens' perception of elite corruption in representative surveys.²²

The Transparency scores range from 1 to 100, with 100 indicating the greatest amount of corruption. Reversing these scores, one obtains a measure of law-abiding elite behavior or elite integrity.²³ We operationalize effective democracy through weighting freedom rights by elite integrity. Since elite integrity shall operate as a weighting factor and not as a compensating factor, we standardize it to 1.0 as its maximum, obtaining fractions from 0 to 1. Hence, to obtain effective democracy, we multiply freedom rights (standardized to a maximum of 100) by fractions from 0 to 1 for elite integrity. This produces an index of effective democracy that has 100 as its maximum. Since we use the most recent Transparency scores from 1999-2000, we obtain a measure of effective democracy in 1999-2000:

$$\begin{array}{lcl} \text{Effective Democracy} & = & \text{Freedom Rights} \quad * \quad \text{Elite Integrity} \\ & & \text{(percentages)} \quad \quad \quad \text{(fractions of 1.0)} \end{array}$$

Note that even if a country comes close to a maximum elite integrity of 1.0 (i.e., almost no elite corruption), the weighting procedure would not compensate for a low level of freedom rights: When a regime reaches only five per cent of the possible maximum in the freedom rights measure, a maximum elite integrity of 1.0 cannot do more than reproducing these five per cent.²⁴ On the other hand, a freedom rights level close to the maximum of 100 per cent can be severely devalued, if elite integrity is so low that it reaches only a small fraction of 1.0. Hence, given freedom rights levels are

devalued to the degree that elite integrity is absent—reflecting that given constitutional guarantees are made ineffective in proportion to elite corruption. High levels of elite integrity cannot produce effective democracy, in absence of freedom rights. High levels of freedom rights, on the other hand, produce formal democracy, but formal democracy is only effective to the degree that elites base their activities on rights instead of bribes.

As Figure 1 illustrates, it is much more difficult for nations to obtain high scores on effective democracy than on freedom rights. Freedom rights translate into effective democracy in a curvilinear way: a relatively large variation in the lower four fifths of the freedom rights scale translates into a relatively small variation in effective democracy; while a small variation in the top fifth of the freedom rights scale translates into large variation in effective democracy. This reflects the fact that freedom rights are a *necessary* condition to create effective democracy: only nations scoring high in freedom rights can attain high scores on effective democracy. But freedom rights are not a *sufficient* condition for effective democracy: not all nations scoring high in freedom rights also score high in effective democracy. Whether or not we include elite integrity in our operationalization of democracy makes a crucial difference: including it clearly provides a more realistic measure of democracy.²⁵

[Figure 1: about here]

We now have comprehensive and meaningful measures, self-expression values and effective democracy, allowing us to examine the linkage between political culture and democratic institutions on a valid basis.

4. The Linkage between Political Culture and Democratic Institutions

Inglehart and his collaborators' analyses of the relationship between political culture and democracy do not imply that the linkage between effective democracy and self-expression values is present because individuals who emphasize self-expression necessarily endorse democracy more than individuals with little emphasis on self-expression. This is the type of cross-level fallacy to which Seligson inadvertently falls victim, arguing that the societal-level correlation between democracy and political culture is spurious unless it is reflected in individual-level correlations between these political culture indicators and support for democracy. Seligson assumes that individual-level lip service to democracy can be equated with the emergence and survival of democratic institutions at the societal level—precisely the sort of cross-level inference that Robinson warned against. The assumption that individual-level endorsement of democracy can be equated with societal-level democracy, is fallacious. At this point in history, overt support for democracy has become extremely widespread, and the citizens of Albania or Azerbaijan are as likely to express a favorable opinion of democracy as are the citizens of Sweden or Switzerland. But these favorable opinions are often superficial, and unless they are accompanied by deeper-rooted orientations of tolerance, trust, and a participatory outlook, the chances are poor that effective democracy will be present at the societal level.

These deeper-rooted orientations, such as those tapped by self-expression values, have their impact at the societal level in promoting effective democracy. In order to demonstrate a linkage between political culture and democratic institutions, individual-level attitudes *must* be aggregated to the nation level, since democracy is an attribute of nations, not of individuals. Thus, one can *only* test the hypothesis that a given political culture is conducive to democratic institutions, at the societal level--

which is the level at which Inglehart and his collaborators have investigated the relationship: no cross-level assumption is involved. The ecological fallacy (and the individualistic fallacy) are based on unwarranted assumptions that a phenomenon that exists at one level, also exists at another level. Inglehart and his collaborators have made no such assumption. Democracy is a societal-level variable, not an attribute of individuals; consequently, the hypothesis that self-expression values are conducive to democracy *must* be tested at the societal level.

[Figure 2: about here]

The aggregate level linkage between political culture and democratic institutions is remarkably strong, as Figure 2 demonstrates. A society's prevailing attitudes on the self-expression values dimension in about 1990 (see Appendix), explain fully 75 per cent of the cross-national variation in effective democracy in 1999-2000.²⁶ This effect does not simply reflect other influences, such as economic development. The effect of self-expression values remains robust when one controls for economic development, experience with democracy and even support for democracy, as the regression analyses in Table 2 shows.

[Table 2: about here]

Comparing model 1 with model 5, economic development²⁷ adds about 6 per cent to the effect of self-expression values on effective democracy. Economic development also captures part of the impact of self-expression values, diminishing their effect from $\beta = .86$ in model 1 to $\beta = .51$ in model 5. Considered conversely, however, the inclusion of self-expression values diminishes the effect of economic development from $\beta = .84$ in model 2 to $\beta = .43$ in model 5, adding 10 per cent of explained variance to what economic development alone explains. This indicates that, although self-expression values and economic development are strongly correlated

with each other, they are not completely exchangeable, since both add a significant amount of explained variance to the effect of the other.

By contrast, the length of time a society has experienced under democratic institutions²⁸ adds very little to the effect of self-expression values on effective democracy (2 per cent to be precise, see models 1 and 6). Moreover, taking into account a society's experience with democracy only slightly diminishes the effect of self-expression values on effective democracy (the beta-coefficient shrinks from .86 in model 1 to .73 in model 6). Conversely, however, experience with democracy's impact on effective democracy shrinks from $\beta=.75$ in model 3 to $\beta=.18$ in model 6, controlling for self-expression values. This implies that self-expression values do not result from the presence of pre-existing democratic institutions. If this were the case, the length of the society's experience with democracy would capture significant parts of the effect of self-expression values—but it does not.

In sharp contradiction to Seligson's unproven cross-level inferences, is the finding that overt support for democracy²⁹ adds *nothing* to the effect of self-expression values on effective democracy (compare explained variances in models 1 and 7). Accordingly, support for democracy only captures a negligible part of the effect of self-expression values on effective democracy (beta shrinks from .86 in model 1 to .83 in model 7). But conversely the effect of support for democracy on effective democracy literally vanishes (shrinking from $\beta=.60$ in model 4 to an insignificant $\beta=.07$ in model 7)--once we control for self-expression values. It may seem surprising that overt support for democracy has so little impact on the presence of effective democracy at the institutional level, but it is important to bear in mind that, since the collapse of communism, lip service to democracy has become almost universal, being given favorable ratings by over 90 percent of the publics of

most countries. It does not tap the qualities of tolerance, self-expression, trust, well being and participatory orientations that are crucial to the functioning of democracy.

To illustrate the findings from Table 2 more clearly, Figure 3 displays the partial plots, showing the effects of self-expression values on effective democracy; and the effects of overt support for democracy on effective democracy—controlling for the effects of the other independent variable in both cases. These partial plots make strikingly clear that the impact of self-expression values on effective democracy is unaffected by the fact that we are controlling for overt support for democracy: it continues to show a strong relationship with effective democracy. But, by contrast, the effect of overt support for democracy on effective democracy disappears when we control for levels of self-expression values.

[Figure 3: about here]

These findings indicate that the impact of a pro-democratic political culture on effective democracy does not operate through its impact on public support for democracy. Figure 4 suggests why this is so: Public support for democracy can be very strong among publics that show low levels of tolerance, trust, participatory orientations and the other components of self-expression values. Let us examine this figure more closely.

[Figure 4: about here]

Strong self-expression values seem to be a *sufficient* condition to create a minimum amount of support for democracy: once we move above the level of self-expression values found in Japan, there are about fifty or more percent of “solid democrats” within each population. On the other hand, strong self-expression values are by no means a *necessary* condition to create a certain proportion of solid democrats. This is evident from the fact that among nations with weak emphasis on

self-expression there can be very low as well as very high proportions of solid democrats (consider, for instance, Albania and Hungary in Figure 4). These observations indicate that overt support for democracy is sometimes inflated by superficial lip service that is not necessarily linked to deeper-rooted democratic values.

Yet, we should refrain from such cross-level inferences without testing them. Let us examine at the individual level what motivates people to express overt support for democracy. Bratton and Mattes³⁰ conducted such an analysis using data from the Afrobarometer. They found that individual support for democracy is determined far more by instrumental motives than by normative commitments to the values that are inherent to democracy. This finding is perfectly replicated in our analysis of the World Values Surveys, as Table 3 shows. Although there is a linkage between support for democracy and self-expression values at the individual level (see model 2), what people think about the performance of democracy in running the economy and maintaining law and order is a much better predictor of their overt support for democracy (compare the explained variances of models 1 and 2). To be sure, people with strong emphasis on self-expression almost always prefer democracy to autocracy, but there is a large number of people who support democracy for reasons of expected performance—even if their emphasis on self-expression is weak. Hence, overt support for democracy is a poor indicator of intrinsic support, since overt support is inflated by instrumentally motivated lip service.

[Table 3: about here]

Conclusion

In analysis of data from the 1981 World Values Surveys, Inglehart found that societies with relatively high levels of interpersonal trust and life satisfaction were much likelier to have democratic institutions than societies with relatively low levels of trust and well being. This is a reliable finding that has been replicated in subsequent waves of surveys covering much larger numbers of countries. It is by no means “spurious,” as Seligson claims. Seligson attempts to refute this societal-level correlation by demonstrating that there are only weak correlations between trust and life satisfaction, on one hand, and lip service to democracy at the individual level. This attempted refutation depends on the implicit assumption that individual-level endorsement of democracy can be equated with democratic institutions at the societal level. This is an unwarranted cross-level assumption—and one that proves to be false. Initially, it may seem plausible to assume that countries with widespread lip service to democracy are more democratic than those where it is less widespread, but it is empirically untrue—because at this point in history, democracy has a favorable image almost everywhere.

Seligson’s assumption that overt support for democracy at the individual level is a reliable measure of democratic institutions at the societal level, is mistaken—and represents an example of the individualistic fallacy. Today, lip service to democracy is widespread-- but it does not necessarily reflect a deep commitment to crucial democratic norms. On the other hand, the evidence indicates that a political culture that emphasizes self-expression, tolerance, trust, life satisfaction and participatory orientations, plays a crucial role in effective democracy. This linkage is remarkably strong and it persists when we control for levels of economic development and for how long a society has experienced democratic institutions. A political culture of

tolerance, trust, and the other components of self-expression values, seems to be essential to the flourishing of democratic institutions.

As shown in recent analyses by Welzel as well as Welzel, Inglehart and Klingemann³¹, effective democracy is an evolutionary phenomenon. It emerges from a broader process of human development, in which economic development tends to promote rising self-expression values that in turn tend to fuel effective democracy. In conclusion, effective democratic institutions are rather a consequence than a precondition of a democratic mass culture.

Appendix

National aggregates of self-expression values have been calculated running the factor analysis shown in Table 1 across the time-pooled aggregated data set of the World Values Surveys, including 137 “nation per wave” units. The time-pooled data matrix provides aggregates of self-expression values from the 2nd WVS (about 1990) for 34 countries, including: Argentina, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China, Denmark, Germany (East), Germany (West), Finland, France, Great Britain, Hungary, Iceland, India, Ireland, Italy, Japan, Latvia, Mexico, Netherlands, Nigeria, Norway, Portugal, Russia, South Korea, Slovenia, Spain, Sweden, Turkey, U.S.A.

For another 29 countries, missing self-expression values in the 2nd WVS have been estimated from existing self-expression values in the 3rd WVS (about 1995). For estimation, we used the following regression equation (which explains 91% of the variance across 21 countries): “SELFEXVAL1990 = .124 + .841 * SELFEXVAL1995.” Estimates based on this equation have been assigned to the following countries: Albania, Armenia, Australia, Azerbaijan, Bangladesh, Bosnia-Herzegovina, Colombia, Croatia, Czech Republic, Dominican Republic, Estonia, Georgia, Ghana, Lithuania, Macedonia, Moldova, New Zealand, Pakistan, Peru, Philippines, Romania, South Africa, Slovakia, Switzerland, Taiwan, Ukraine, Uruguay, Venezuela, Yugoslavia.

For still another 10 countries, missing self-expression values in the 2nd WVS have been estimated from existing self-expression values in the 4th WVS (about 2000). For estimation, we used the following regression equation (which explains 92% of the variance across 28 countries): “SELFEXVAL1990 = .047 + .858 *

SELFEXVAL2000.” Estimates based on this equation have been assigned to the following countries: Egypt, El Salvador, Greece, Iran, Jordan, Luxembourg, Malta, Poland, Uganda, Zimbabwe. In case of Jordan, New Zealand and Pakistan, aggregates for self-expression values have been calculated excluding “tolerance of diversity” (see fn. 1 in Table 1 for operationalization), since the relevant questions were not asked there.

Table 1: The Dimension of Self-Expression Values

Variables:	Levels of Analysis:		
	Individual level within nations (mean loadings)	Individual level across nations (pooled data)	Aggregate cross-national level
Strong self-expression values reflect strong emphasis on the following attitudes/behavior:			
- Tolerance of diversity ¹	.47	.68	.82
- Public Self-expression ²	.45	.65	.87
- Liberty and Participation ³	.54	.59	.82
- Interpersonal Trust ⁴	.34	.47	.64
- Life Satisfaction ⁵	.13	.44	.76
Weak self-expression values reflect weak emphasis on these attitudes/behavior.			
Explained variance	23%	29%	54%
Number of cases	137 national surveys	158,803 individuals	137 nation per wave units
<p><i>Notes:</i> Entries are factor loadings. Explorative principal components analysis (extraction of factors with ‘Eigenvalues’ above 1 advised), no rotation. <i>Source:</i> European/World Values Surveys I-IV.</p> <p>¹ “Not mentioned” for “disliked neighbors” coded “1” and dichotomized against 0; scores added for neighbors with AIDS (V58) and homosexual neighbors (V60). Aggregate data are national averages on this 0-2 scale.</p> <p>² “Have done” for “signing petitions (V118) coded “1” and dichotomized against “0.” Aggregate data are national percentages have done.</p> <p>³ Respondents’ first and second priorities for “giving people more say in important government decisions” and “protecting freedom of speech” (V106-107) added to a four-point index, assigning 3 points for both items on first and second rank, 2 points for one of these items on first rank, 1 point for one of these items on second rank and 0 for none of these items on first or second rank. Aggregate data are national averages on this 0-3 scale.</p> <p>⁴ Respondents believing “most people can be trusted” (V27) dichotomized as “1” against “0.” Aggregate data are national percentages of people trusting.</p> <p>⁵ 10-point rating scale for life satisfaction (V65). Aggregate data are national averages on this 1-10 scale.</p>			

Figure 1: Freedom Rights and Effective Democracy

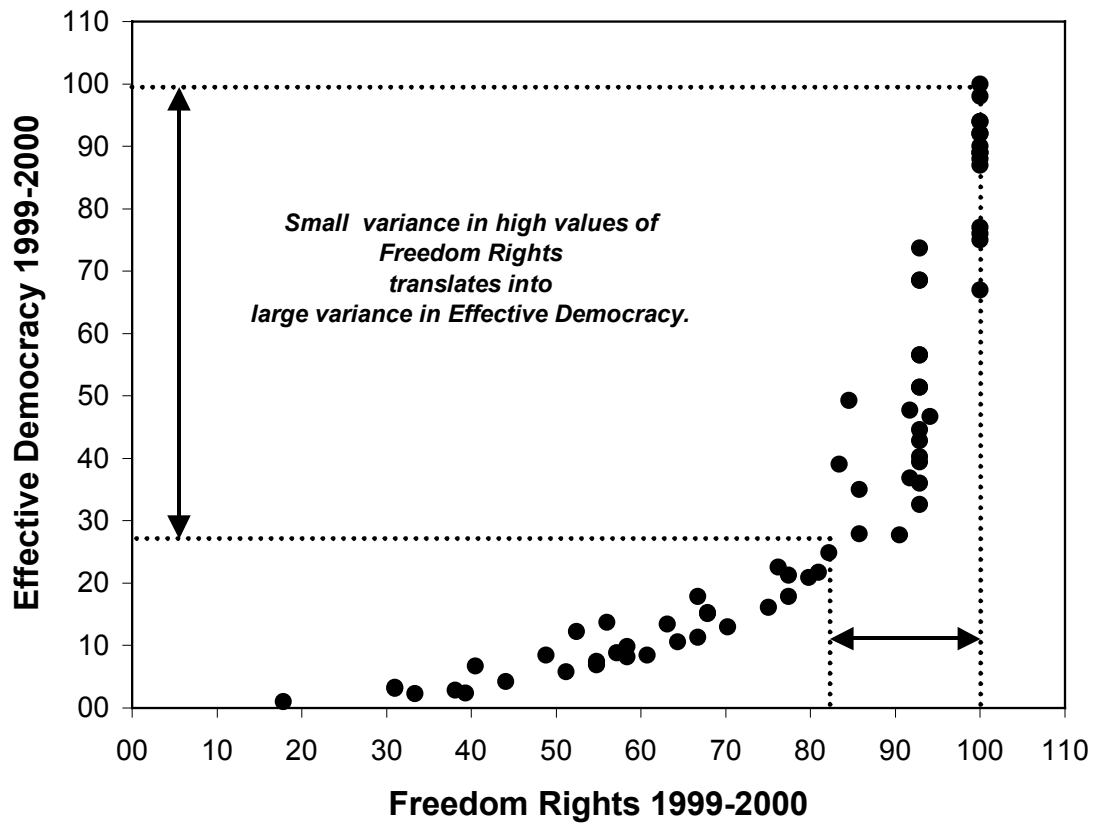


Figure 2: Political Culture and Democratic Institutions

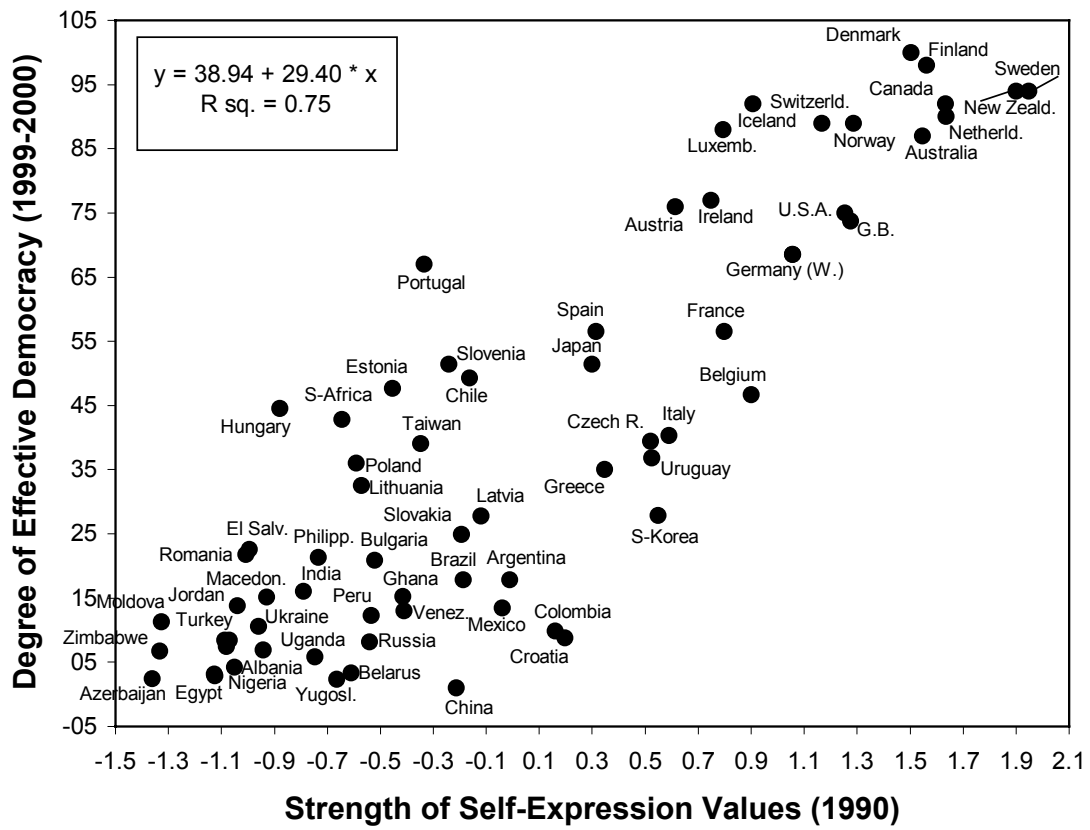


Table 2: The Effect of Self-Expression Values on Effective Democracy Controlling for Rival Predictors

	Dependent Variable: Effective Democracy 1999-2000													
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
Predictors:	B (SE)	Beta	B (SE)	Beta	B (SE)	Beta	B (SE)	Beta	B (SE)	Beta	B (SE)	Beta	B (SE)	Beta
Self-Expression Values	27.15*** (1.94)	.86							15.95*** (3.13)	.51	23.07*** (3.01)	.73	24.88*** (3.03)	.83
GDP per capita 1995			.003*** (.000)	.84					.001*** (.000)	.43				
Experience with democracy until 1995					.50*** (.05)	.75					.12* (.06)	.18		
Support for Democracy 1995-98							.91*** (.19)	.60					.10 (.15)	.07
Constant	43.61*** (1.80)		13.22*** (2.13)		23.06*** (3.22)		-2.25 (9.55)		28.98*** (3.76)		38.65*** (3.09)		37.82*** (7.69)	
Adjusted R ²	.74		.70		.55		.34		.80		.76		.74	
N	68		99		69		44		68		67		44	

Figure 4: Support for Democracy and Self-Expression Values

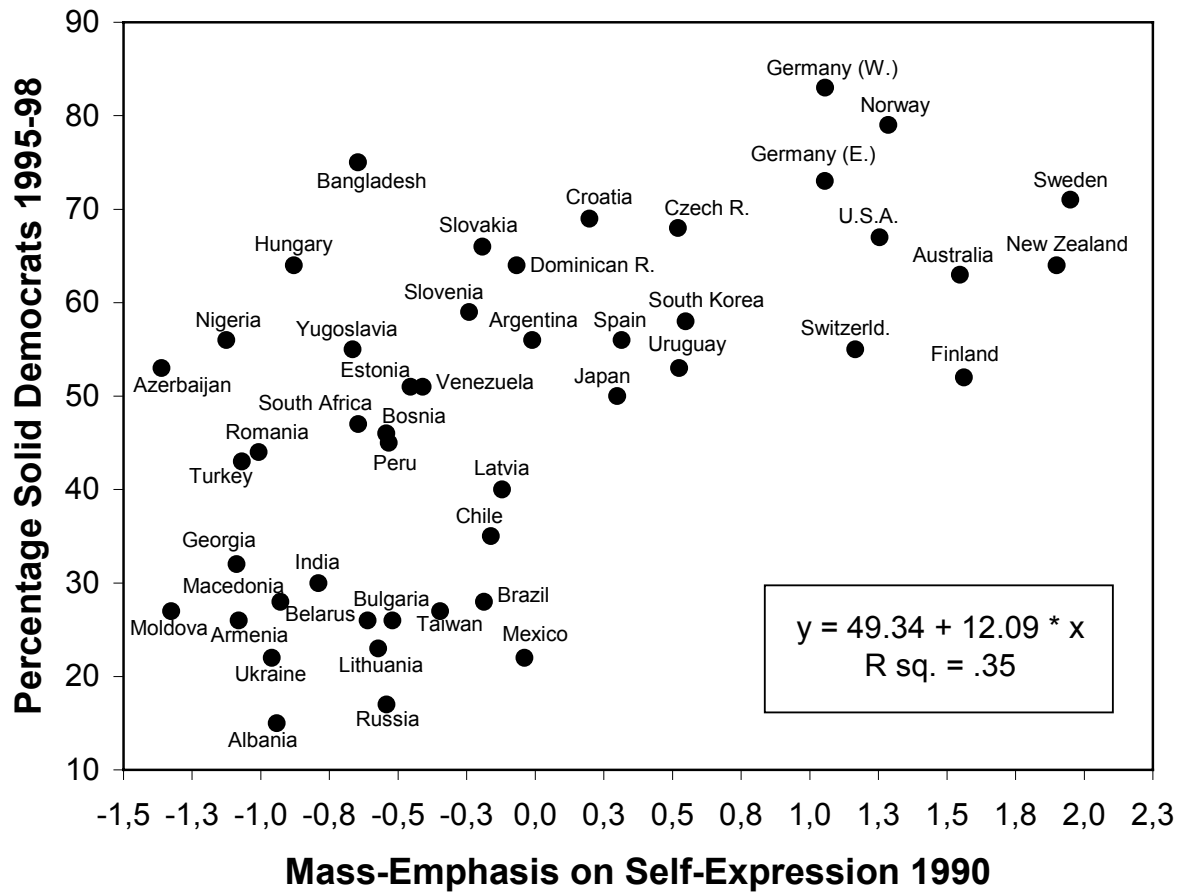


Table 3: Predicting Support for Democracy at the Individual Level

Predictors:	Dependent Variable: Support for Democracy 1995-98					
	Instrumental Support Model		Intrinsic Support Model		Combined Model	
	B (SE)	Partial R	B (SE)	Partial R	B (SE)	Partial R
Democracies have bad economy ^{a)}	-.86 (.02)	-.20***			-.84 (.02)	-.19***
Democracies are indecisive ^{b)}	-.23 (.02)	-.06***			-.21 (.02)	-.05***
Democracies are bad in maintaining order ^{c)}	-.65 (.02)	-.16***			-.59 (.02)	-.14***
Self-Expression Values ^{d)}			.66 (.02)	.18***	.42 (.02)	.13***
Constant	-.56 (.06)		4.55 (.05)		-.16 (.07)	
Adjusted R ²	.24		.11		.25	
N	56,894		59,450		50,531	

a) V160 "In democracies, the economic system runs badly." Answers recoded (4: strongly agree, 3: agree, 2: disagree, 1: strongly disagree).

b) V161 "Democracies are indecisive and have too much quibbling." For coding, see a).

c) V162 "Democracies aren't good at maintaining order." For coding, see a).

d) Pooled individual-level factor scores for variables specified in Table 1 (center column).

All effects significant at the .001-level. Effects obtained after introducing controls for cultural zones, using dummies for each of the nine cultural zones specified by Inglehart and Baker (see footnote 8). Effects of cultural zone dummies not documented for reasons of space restriction.

Source: European/World Values Surveys III (1995-98).

¹ Mitchell Seligson, "The Renaissance of Political Culture or the Renaissance of the Ecological Fallacy," *Comparative Politics* 34 (April 2002), 273-292.

² Adam Przeworski and Henry Teune, *The Logic of Comparative Social Inquiry* (New York: Wiley, 1970), ch. 3.

³ William S. Robinson, "Ecological Correlations and the Behavior of Individuals," *American Sociological Review* 15 (1950), 351-357.

⁴ Seymour Martin Lipset, "Some Social Requisites of Democracy: Economic Development and Political Legitimacy," *American Political Science Review* 53 (1959), 69-105.

⁵ Gabriel Almond and Sidney Verba, *The Civic Culture: Political Attitudes in Five Western Democracies* (Princeton: Princeton University Press, 1963).

⁶ Hayward R. Alker Jr., "A Typology of Ecological Fallacies," in Mattei Dogan and Stein Rokkan, eds., *Quantitative Ecological Analysis in the Social Sciences* (Cambridge: MIT Press, 1969), 69-86.

⁷ Ronald Inglehart, *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies* (Princeton: Princeton University Press, 1997).

⁸ Ronald Inglehart and Wayne E. Baker, "Modernization, Cultural Change and the Persistence of Traditional Values." *American Sociological Review* 65 (February 2000), 19-51.

⁹ Christian Welzel, *Fluchtpunkt Humanentwicklung: Die Grundlagen der Demokratie und die Ursachen ihrer Ausbreitung* [Focus Human Development: The Foundations of Democracy and the Causes of its Expansion] (Opladen: Westdeutscher Verlag, 2002).

¹⁰ Christian Welzel, Ronald Inglehart and Hans-Dieter Klingemann, "The Theory of Human Development: A Cross-Cultural Analysis," *European Journal of Political Research* 42 (April 2003), forthcoming.

¹¹ Hubert M. Blalock Jr., *Causal Inferences in Nonexperimental Research* (New York: Seminar Press, 1964).

¹² Philip E. Converse, "The Nature of Belief Systems among Mass Publics," in David E. Apter, ed., *Ideology and Discontent* (New York: Free Press, 1964), pp. 206-261.

¹³ Note that the individual-level data are measured in ordinal or dichotomous scales (that transform into continuous scales at the aggregate level). Considering this scale

level, the Pearson product-moment correlations tend to underestimate the “real” correlations. Using tetrachoric correlations alternatively, provides somewhat stronger correlations at the individual-level (not documented here). But still, these correlations are considerably weaker than those at the aggregate-level. See Karl G. Jöreskog, “New Developments in LISREL: Analysis of Ordinal Variables Using Polychoric Correlations and Weighted Least Squares.” *Quality & Quantity* 24 (1990), 387-404.

¹⁴ Benjamin Page and Robert Y. Shapiro, “The Rational Public and Democracy,” in G. E. Marcus and R. L. Hanson, eds., *Reconsidering the Democratic Public* (Pennsylvania: Pennsylvania State University Press, 1993), p. 43.

¹⁵ Robert S. Erikson, Michael B. MacKuen, and James A. Stimson, *The Macro Polity* (New York: Cambridge University Press, 2002).

¹⁶ Richard Rose, “A Divergent Europe,” *Journal of Democracy* 12 (January 2001), 93-106.

¹⁷ This conception of effective democracy has been introduced by Welzel, p. 155-160.

¹⁸ The Freedom House scores can be obtained from the Freedom House homepage: <http://www.freedomhouse.org>. For a description of the estimation process and scale construction, see Freedom House, ed., *Freedom in the World* (Lanham: University Press of America, 1996), pp. 530-535.

¹⁹ Zachary Elkins, “Gradiations of Democracy? Empirical Tests of Alternative Conceptualizations,” *American Journal of Political Science* 44 (April), 287-294, provides convincing theoretical reasons, plus empirical evidence, that continuous measures of democracy are superior to dichotomous classifications of democracies vs. non-democracies.

²⁰ Ted R. Gurr and Keith Jagers, “Tracking Democracy’s Third Wave with the Polity III Data,” *Journal of Peace Research* 32 (2 1995), 469-482, demonstrate that the Freedom House scores correlate strongly with alternative measures of democracy. For a cross-validation of the Freedom House scores in relation to alternative indicators, see Kenneth Bollen and Pamela Paxton, “Subjective Measures of Liberal Democracy,” *Comparative Political Studies* 33 (2, 2000), 58-86.

²¹ Data and methodological report can be obtained from Transparency International’s homepage: <http://www.transparency.org>.

²² Rose, p. 93-106.

²³ Seymour Martin Lipset and Gabriel S. Lenz, “Corruption, Culture and Markets,” in Lawrence E. Harrison and Samuel P. Huntington, eds., *Culture Matters: How Values Shape Human Progress* (New York: Basic Books, 2000), 112-124.

²⁴ Thus, uncorrupt authoritarian regimes do not wind up receiving the same effective democracy score as slightly corrupt democratic regimes. Democratic regimes must be extremely corrupt in order to slump down to the same effective democracy score as an uncorrupt authoritarian regime.

²⁵ The curvilinear relationship is not simply pre-defined by the way we construct effective democracy. If, for instance, high levels of freedom rights would tend to produce high rates of elite integrity, there would be a linear rather than a curvilinear relationship.

²⁶ This relationship is not tautological. Conceptually, self-expression values and effective democracy measure clearly distinguished phenomena; empirically, the data are taken from completely different sources.

²⁷ Measured in 1995 per capita GDP in purchasing power parities. Data taken from World Bank, ed., *World Development Indicators* (Washington D. C., 1998).

²⁸ This variable measures the number of years that a country has spent under a democratic constitution. These years haven been counted from the beginning of a nation’s independence (or from 1850 onward in case of countries that have not independent before 1850) until 1995. Countries that emerged from the dissolution of the Soviet Union and Yugoslavia have been coded like their former mother country as long as they belonged to it. A year has been counted as one under a democratic constitution, if a country obtained at least +7 points on the “Autocracy-Democracy” index from Gurr and Jagers (see footnote 201). This index is based on an analysis of constitutions considering the extent of restrictions on executive power and the voters’ opportunities to influence politics. Gurr and Jagers classify countries as “coherent democracies,” if they reach +7 or more points on their –10 to +10 index. Data and methodological description can be obtained from the homepage of the “Polity 98” project: <http://www.bsos.umd.edu/cidcm/polity>. We used these data here because they reach farther back in time than the scores from Freedom House and are therefore more adequate to measure the endurance of the democratic tradition.

²⁹ Democracy-scale according to Hans-Dieter Klingemann, “Mapping Political Support in the 1990s: A Global Analysis,” in Pippa Norris, ed., *Critical Citizens:*

Global Support for Democratic Governance (New York: Oxford University Press, 1999), 31-56. In the first step, we added up respondent's support of the statements „Having a democratic political system“ (V157) and „Democracy may have problems but it's better than any other form of government“(V163). Support for these statements could be expressed in four categories: „very good“ (code 3), „fairly good“ (code 2), „fairly bad“ (code 1) and „very bad“ (code 0) in case of V157 and „agree strongly“ (code 3), „agree“ (code 2), „disagree“ (code 1) and „disagree strongly“ (code 0) in case of V163. People's support for these statements has been added up to a 0-to-6 scale, with 6 representing the highest support for democracy. In the second step, we added up people's support of the statements „Having a strong leader who does not have to bother with parliament and elections“ (V154) and „Having the army rule“ (V156). Analogous to the first step, this creates a 0-to-6 scale of support for autocracy. In the third step, we subtracted the “support for autocracy” scale from the “support for democracy” scale to create an overall index of “autocratic versus democratic support,” ranging from –6 (maximum autocratic support) to +6 (maximum democratic support). In the fourth step, we calculated for each country the percentage of people scoring on at least +4 on this index (since from +4 onward you are closer to the maximum democratic support (+6) than to the neutral point (0)). Hence, we obtain the percentage of “solid democrats” for each country.

³⁰ Michael Bratton and Robert Mattes, “Support for Democracy in Africa: Intrinsic or Instrumental?” *British Journal of Political Science* 31 (2001), 447-474.

³¹ See footnotes 9 and 10.